

now in the same collection mounted on a slide in xylol-balsam (temporarily in my possession).

LITERATURE REFERRED TO.

1832. CURTIS, JOHN. British Entomology; being illustrations and descriptions of the genera of insects, *etc.*, London, IX, p. 411 (2 pp.), pl. 411 (colored fig. adult female and 5 figs. of details—male, female antenna, mandible, fore leg and lateral aspect of the abdomen).
1847. FOERSTER, ARNOLD. Ueber die Familie der Mymariden. *Linnaea* (entom.), II, p. 225. Separate, undated.
1879. WESTWOOD, JOHN OBADIAH. Descriptions of Some Minute Hymenopterous Insects. *Trans. Linnæan Soc. of London, Zoölogy*, second series, I, June, p. 584, pl. 73, fig. 3.

A NEW CAMPONOTUS FROM CALIFORNIA.

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Camponotus anthrax, new species.

Worker Major.—Length 7-9 mm.

Belonging to the *fallax* group. Head large, as broad as long, broader behind than in front, with broadly and feebly excised posterior border, rounded posterior corners and convex sides; in profile very convex above, flattened below. Eyes rather large, broadly elliptical, flat. Mandibles convex, 6-toothed. Clypeus feebly convex, ecarinate, its anterior border impressed in the middle, with a small but distinct notch. Antennal scapes not reaching the posterior corners of the head, slender and not flattened at the base, distinctly incrassated towards their tips. Thorax not longer than the head including the mandibles, and in front half as broad as the head; in profile feebly and rather evenly arcuate above, laterally compressed in the meso- and metapleural regions. Promesonotal suture very distinct; metanotum clearly outlined. Epinotum in profile with subequal base and declivity, forming together an obtuse angle, the former nearly horizontal, the latter slightly concave. Petiole nearly as broad and high as the epinotum, compressed anteroposteriorly, with blunt, rounded and entire border; its anterior and posterior surfaces both flat and the anteroposterior diameter the same above as below. Gaster elliptical, its dorsal surface distinctly flattened. Legs as usual, the fore femora slightly incrassated, the hind tibiæ broadly elliptical in cross-section, their surfaces neither flattened nor sulcate.

Head and mandibles shining, especially the cheeks, gula, posterior corners, vertex and occiput; clypeus and front more opaque through being

rather sharply shagreened. Whole surface of head sparsely punctate, the punctures being more numerous on the mandibles, cheeks, clypeus and front than on the sides, posterior corners and occiput. Thorax shining, the pro- and mesonotum finely, the pleuræ, epinotum and petiole more coarsely shagreened, so that these parts are more opaque. Pro- and mesonotum coarsely and sparsely punctate. Gaster glossy, its surface coarsely and transversely shagreened and covered with small piligerous punctures. Legs shining, delicately shagreened.

Hairs and pubescence pale yellowish; the former long, sparse and erect on the upper surface of the head and thorax, on the gula, border of petiole and dorsal and ventral surfaces of the gaster. Tips of femora and antennal scapes with a few short hairs. Pubescence sparse, short and inconspicuous on the head, thoracic dorsum, legs and scapes, longer on the upper surface of the gaster. Sides of head without hairs or pubescence. Hind tibiæ without bristles along their flexor surfaces.

Deep black; antennal funiculi and sometimes also the legs, mandibles, clypeus, anterior border of the head and thoracic sutures more or less tinged with dark brown or red; posterior borders of gastric segments brownish yellow, with a golden reflection.

Worker Minor.—Length 3.5–6 mm.

Differing from the worker major in the small size and shape of the head, which is somewhat longer than broad, with less convex sides and more nearly straight posterior border. Mandibles 5-toothed. Clypeus subcarinate, the notch in the middle of its anterior border small and indistinct. Antennal scapes reaching nearly one-third their length beyond the posterior corners of the head. Eyes rather large, very feebly convex.

Sculpture, pilosity and color as in the worker major, except that the sides and posterior portions of the head are less shining, the mandibles are red and the sparse pubescence is more conspicuous on the upper surface of the head and thorax.

Female.—Length 9–11 mm.

Resembling the worker major. Head longer than broad, a little broader behind than in front, with straight sides and posterior border. Antennal scapes reaching a little beyond the posterior corners. Thorax through the wing insertions as broad as the head. Epinotum with short, convex base and longer, abrupt declivity. Petiole in profile narrowed from the base upward to a sharp border, which is rounded, entire and slightly produced in the middle line when seen from behind. Wings long (10 mm.).

Sculpture, pilosity and color much as in the worker major, except that the pronotum and scutellum are more glabrous and shining and the upper surface of the gaster is smoother and less glossy. Wings tinged with brownish; veins and stigma pale brown.

Male.—Length 7–8 mm.

Head, including the eyes, as long as broad, rounded behind, with straight

cheeks as long as the eyes. Eyes and ocelli rather small. Mandibles edentate. Clypeus convex but ecarinate, with rounded, entire anterior border. Antennæ slender; scapes extending fully one-half their length beyond the posterior margin of the head; first funicular joint but little incrassated at the apex, as long as the second. Thorax long and robust, broader than the head; base of epinotum convex, nearly as long as the declivity, which is abrupt and somewhat flattened. Petiole low in profile, thick at the base, narrowed towards the summit, with a moderately sharp border; seen from behind, it is transverse and deeply excised in the middle. Gaster and legs of the usual shape, the latter slender, with large pulvilli.

Body shining, finely and densely shagreened. Mesonotum with a few scattered foveolæ.

Pilosity and pubescence similar to those of the worker, but the hairs are shorter and the pubescence is more delicate and somewhat denser, at least on the gaster.

Body and appendages deep black; bases of genital valves piceous; pulvilli white. Wings like those of the female, but slightly paler.

Described from numerous specimens of all four phases taken January 1, 1911, from five colonies, which I found nesting in the ground under large stones among the chaparral at an altitude of about 1,000 feet at the mouth of San Ysidro Canyon in the Santa Ynez Mountains near Santa Barbara, California.

C. anthrax closely resembles the typical *C. fallax* Nyl. of Europe and our North American var. *nearcticus* Emery, but is readily distinguished by its deeper black color, the larger, more shining and laterally more convex head of the soldier, the peculiar sculpture and pubescence of its gaster and the 6-toothed, instead of 4-5-toothed mandibles. The head of the worker ^{is} major is, indeed, much like that of *C. sayi* Emery and the gaster in sculpture and pilosity resembles that of certain forms of *C. herculeanus*, *c. g.*, the var. *whymperi* Forel. The new species differs, moreover, from the other members of the *fallax* group in habits, since it nests in the ground and not in dead wood.